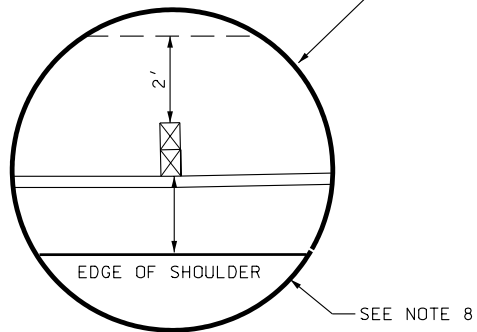
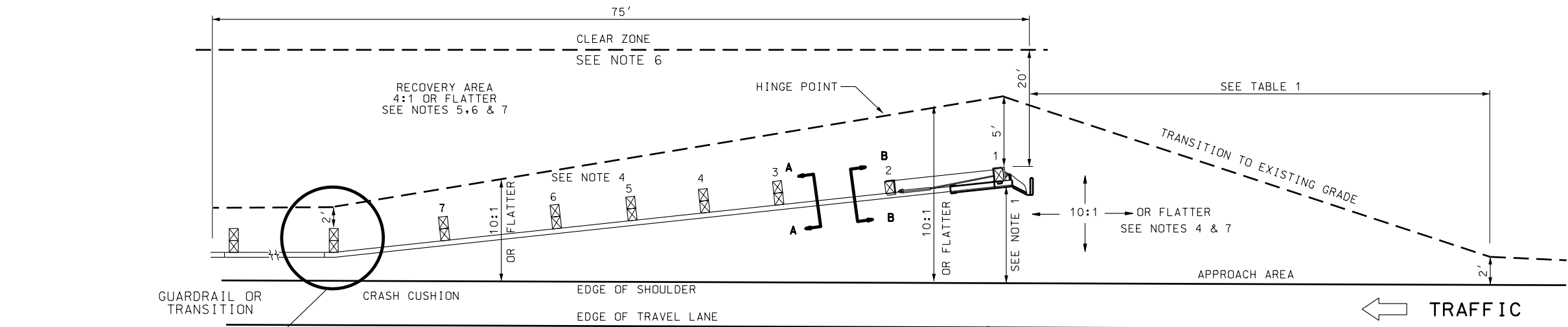


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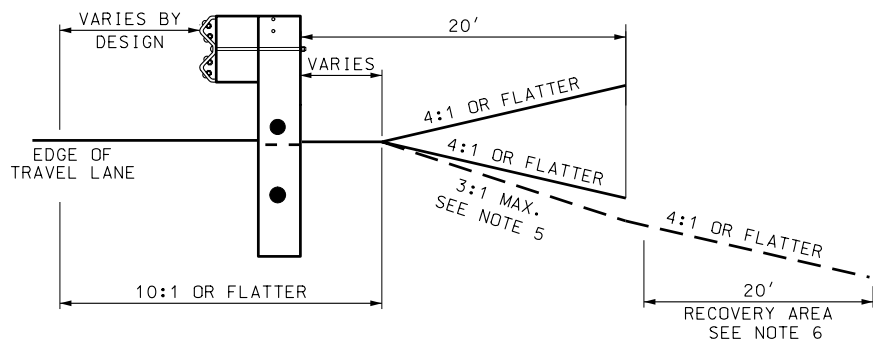


FLEAT - 350 / SRT-350/HBA  
WOOD POST  
OPTION SHOWN  
SEE NOTE 2

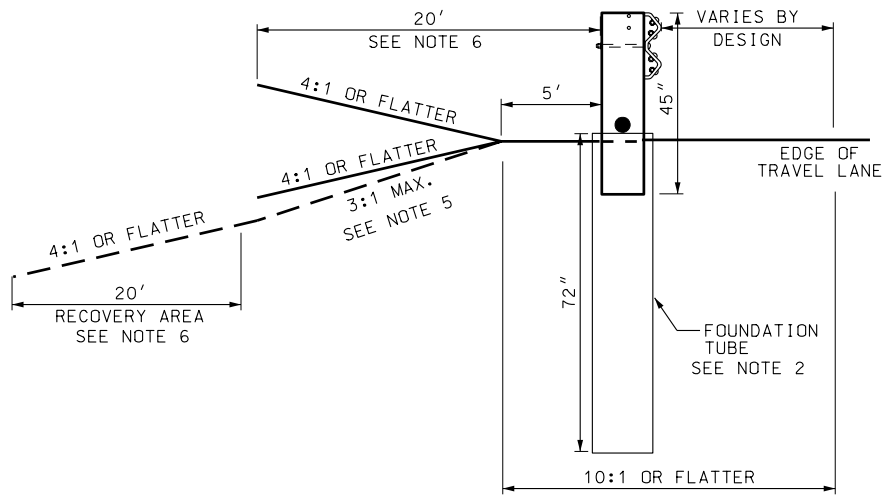
SEE NOTE 3 & 8

#### NOTES FOR END SECTION TYPE H

1. THE **FLEAT-350**, MANUFACTURED BY ROAD SYSTEMS, INC. AND THE **SRT-350/HBA**, MANUFACTURED BY SYRO INC., TRINITY INDUSTRIES. BOTH SYSTEMS INCORPORATE A STRAIGHT LINE FLARE. INSTALL SYSTEMS WITH A 4 FOOT OFFSET WHEN INSTALLED WITH A TANGENT BARRIER INSTALLATION. WHEN USING A FLARED BARRIER INSTALLATION, INSTALL AT THE SAME FLARE RATE AS THE BARRIER.
2. **FLEAT-350** USES WOOD CONTROL RELEASE TERMINAL (**CRT**) POSTS AND WOOD BLOCKS, OR STEEL BREAKAWAY POSTS WITH ROUTED WOOD BLOCKS OR COMPOSITE BLOCKS. SYSTEM USES FOUNDATION TUBES AT POSTS 1 AND 2 FOR BOTH APPLICATIONS. THE TOP OF FOUNDATION TUBE IS NO GREATER THAN 4 INCHES ABOVE GROUND LINE. WHEN SYSTEM IS INSTALLED USING CRT POSTS, THE BOTTOM OF TOP HOLE IS AT GROUND LEVEL. WHEN SYSTEM IS INSTALLED USING STEEL BREAKAWAY POSTS, USE ONLY THE MANUFACTURER'S SPECIFIED STEEL BREAKAWAY POSTS AND THE BREAKAWAY JOINT IS PLACED 1 INCH ABOVE GROUND LINE.
3. **SRT-350/HBA** USES STEEL HINGED BREAKAWAY POSTS AT POSTS 1 AND 2 AND STANDARD **CRT** POSTS AT POSTS 3 THROUGH 6. USE ONLY THE MANUFACTURER'S SPECIFIED STEEL BREAKAWAY POSTS. THE BREAKAWAY JOINTS ARE PLACED AT GROUND LINE. THE BOTTOM OF THE TOP HOLE OF THE **CRT** POSTS ARE PLACED AT GROUND LEVEL. THE LAST POST OF THE GUARDRAIL INSTALLATION, WHEN THIS SYSTEM IS USED, IS REQUIRED TO BE A CRT POST AND IS NOT PART OF THIS SYSTEM. THIS SYSTEM CANNOT BE USED WITH A TRANSITION ELEMENT STD DWG BA 4A, EXCEPT AS SPECIFIED IN NOTE 8.
4. COMPLETE SLOPE GRADING REQUIREMENTS PRIOR TO INSTALLATION. A SLOPE OF 10:1 TO THE RAIL ELEMENT FACE, APPROACH AREA AND DIRECTLY BEHIND THE SYSTEM IS REQUIRED. NO SLOPES GREATER THAN 4:1 TO THE EXISTING SLOPE AT THE HINGE POINTS BEHIND THE SYSTEM AND THE APPROACH AREA TRANSITION.
5. USE A 4:1 OR FLATTER FILL SLOPE IN RECOVERY AREA. IF IMPRACTICAL, USE A MAXIMUM 3:1 FILL SLOPE AND ESTABLISH A RECOVERY AREA AT THE TOE OF THE 3:1 FILL SLOPE. WHEN USED WITH A CUT SLOPE, A 4:1 OR FLATTER CUT IS REQUIRED IN THE RECOVERY AREA.
6. RECOVERY AREA 20 FEET X 75 FEET MINIMUM. MAY NEED TO BE GREATER TO MEET AASHTO CLEAR ZONE REQUIREMENTS FROM THE EDGE OF TRAVEL LANE.
7. CLEAR RECOVERY AND APPROACH AREAS OF ANY FIXED OBJECTS.
8. USE GUARDRAIL TRANSITION, STD DWG BA 4A, WHEN ATTACHING THE **FLEAT-350** SYSTEM TO CONCRETE BARRIER OR BRIDGE PARAPET. THE **SRT-350/HBA** CANNOT BE DIRECTLY ATTACHED TO THE TRANSITION ELEMENT. AN ADDITIONAL 12½ FOOT SECTION OF STANDARD GUARDRAIL WITH A **CRT** POST AT THE ATTACHMENT POST IS REQUIRED.
9. INSTALL REQUIRED MARKINGS AS PER STD DWG CC 1.
10. REFER TO THE GUIDELINES FOR CRASH CUSHIONS FOR SPECIFIC SYSTEM INFORMATION.



TYPICAL SECTION A-A  
POST 3-8



TYPICAL SECTION B-B  
POST 1-2  
SEE NOTES 2 & 3

TABLE 1

SPEED MPH	TAPER	MINIMUM LENGTH FEET
LESS THAN 40	7:1	70
40 TO 55	10:1	100
60 TO 75	15:1	150

#### REVISIONS

NO.	DATE	APPR.	REMARKS
1	01/29/03	G.S.	NEW DRAWING

#### UTAH DEPARTMENT OF TRANSPORTATION

STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION

SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL

CHAIRMAN STANDARDS COMMITTEE  
APPROVED

DEPUTY DIRECTOR

#### GRADING & INSTALLATION DETAILS CRASH CUSHION TYPE H

STANDARD DRAWING TITLE

STD DWG

CC 9A